



TESORO AVON MOTEMS COMPLIANCE PROJECT

July 16, 2015

Tom Lu - Martinez Refinery Manager

Matt Buell – Martinez Environmental Manager

TESORO MARTINEZ – AT A GLANCE



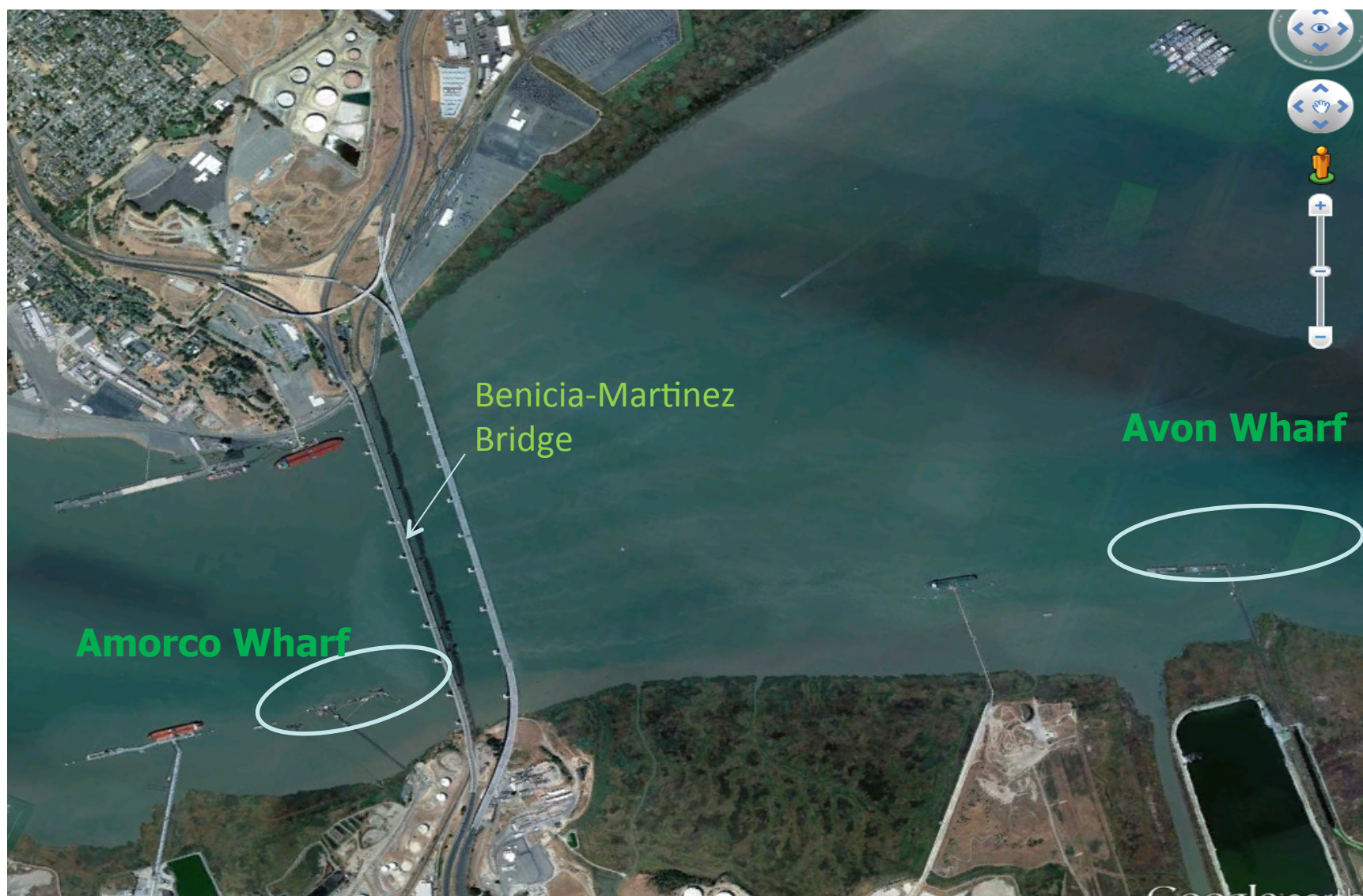
- 650 employees -- using a “multiplier” effect this means 5,200 jobs that rely on our business
- 700 - 1500 contract employees (depending on projects)
- \$97 million in annual payroll; \$16 million in Property Tax paid in 2014
- One of five Bay Area refineries supplying 15-20% of local fuel supplies
- Also one of the four refineries that have continuously operated here since ca. 1915
- Marine transportation accounts for 20% of refinery petroleum product movement

PROJECT OVERVIEW

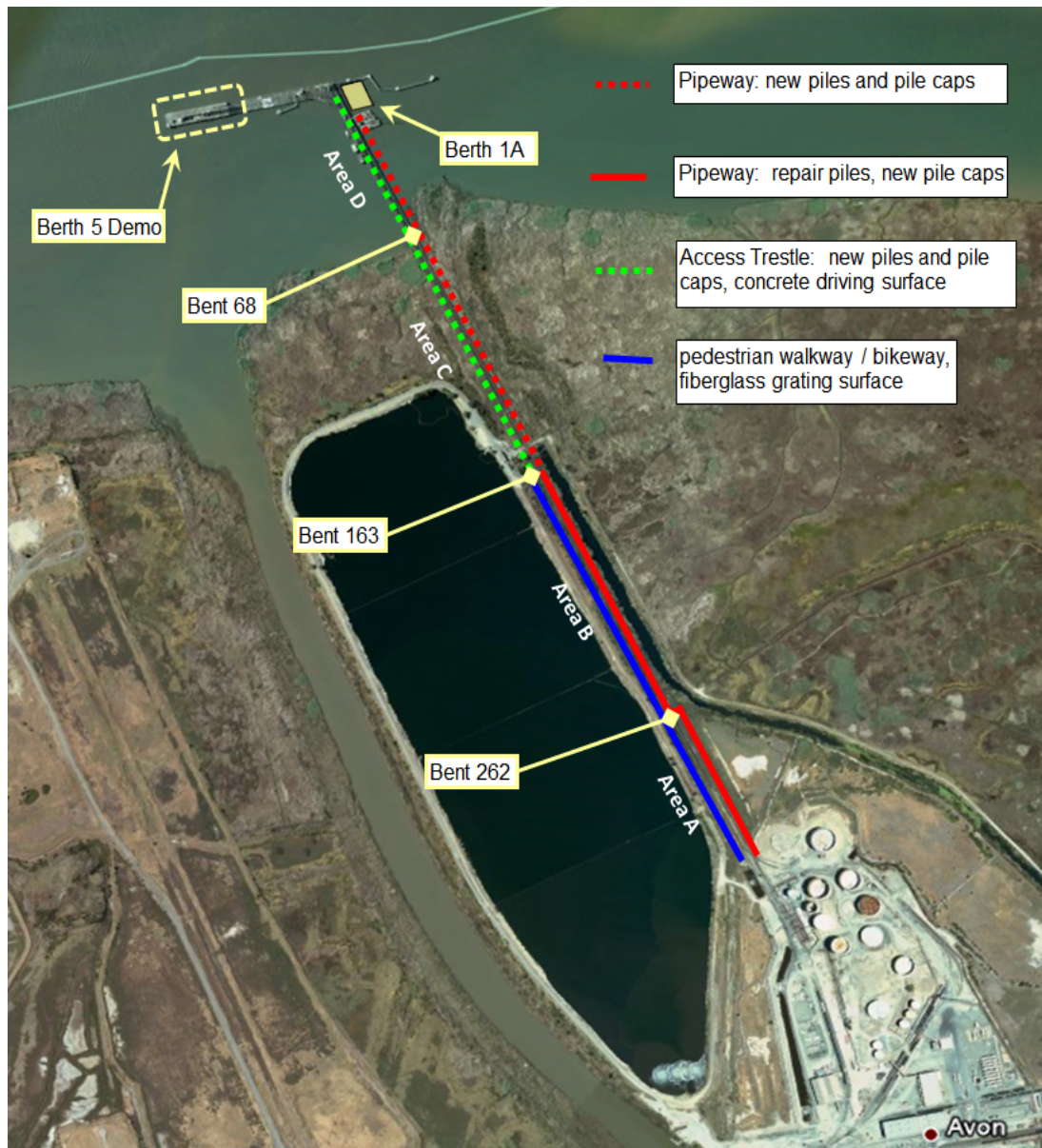


- MOTEMS - Standards were developed to ensure that California Marine Oil Terminals meet the highest levels of safe operation and protection of the environment
- This project will consist only of upgrading the existing Avon Marine Terminal to current MOTEMS Standards - with no additional capacity for product transfers
- The Avon Marine Terminal does not bring in crude oil - a lease condition does not allow crude unloading without State approval
- State Lands Commission requires project completion by June 2017

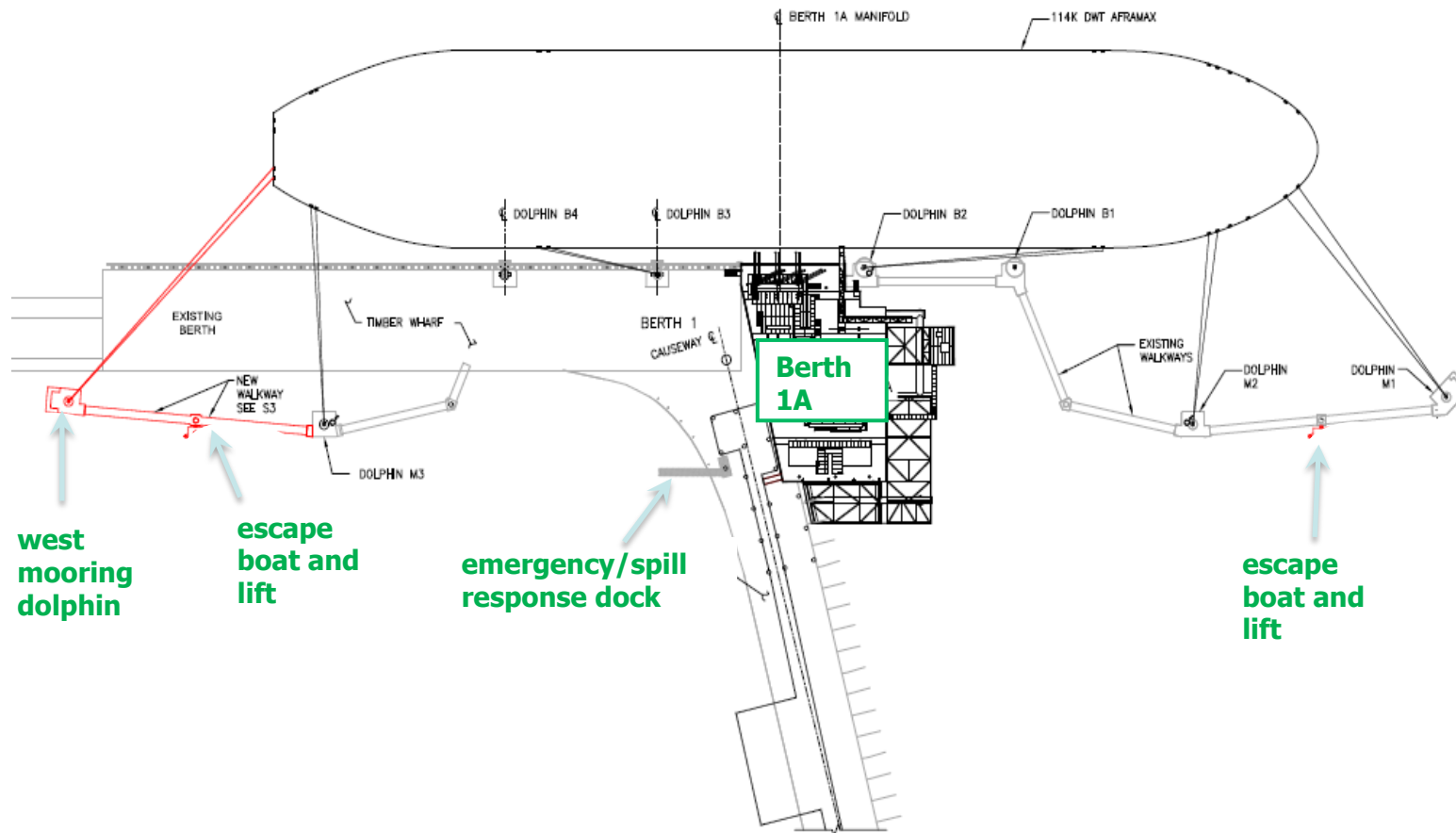
MARTINEZ REFINERY MARINE TERMINALS



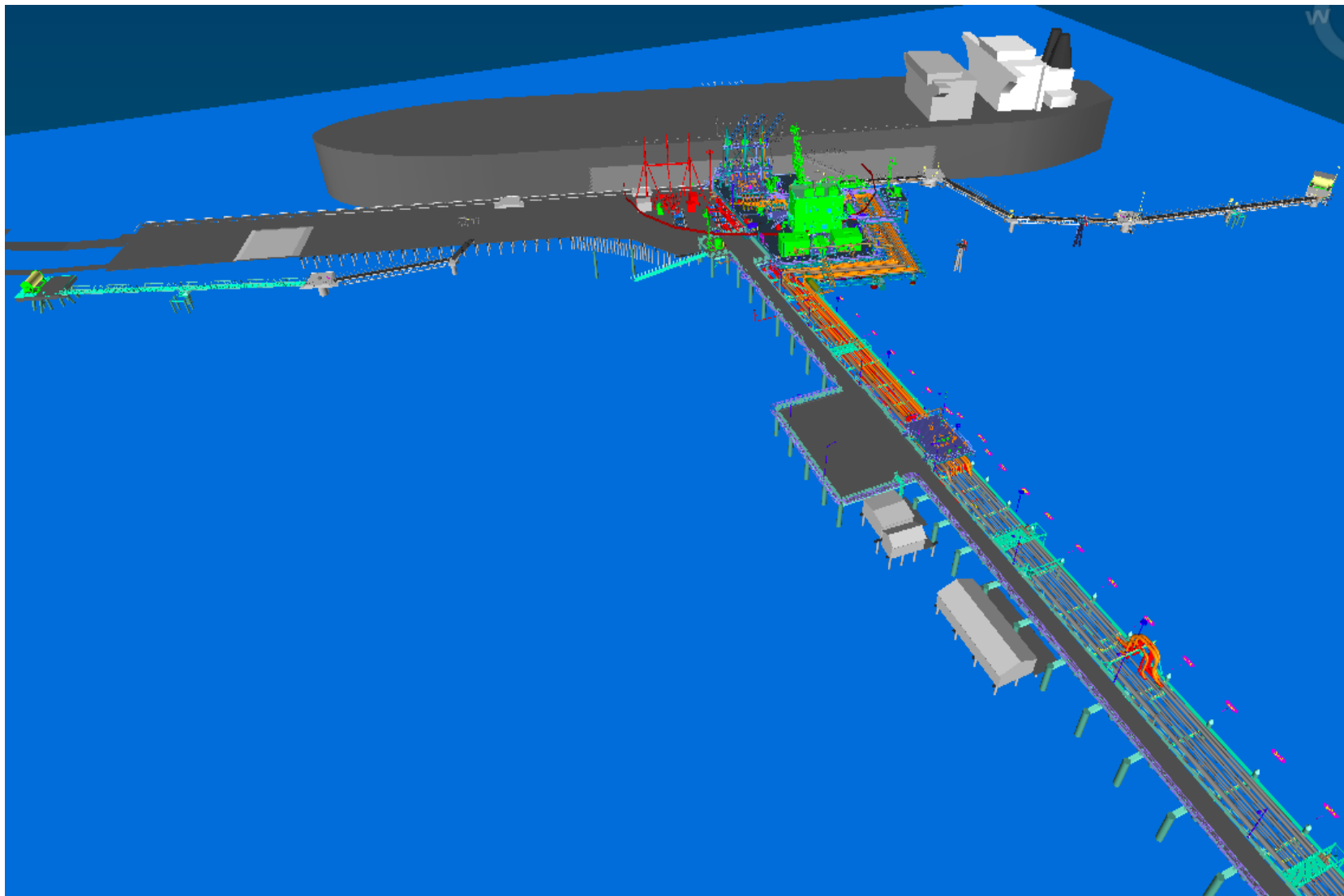
PROJECT AREA



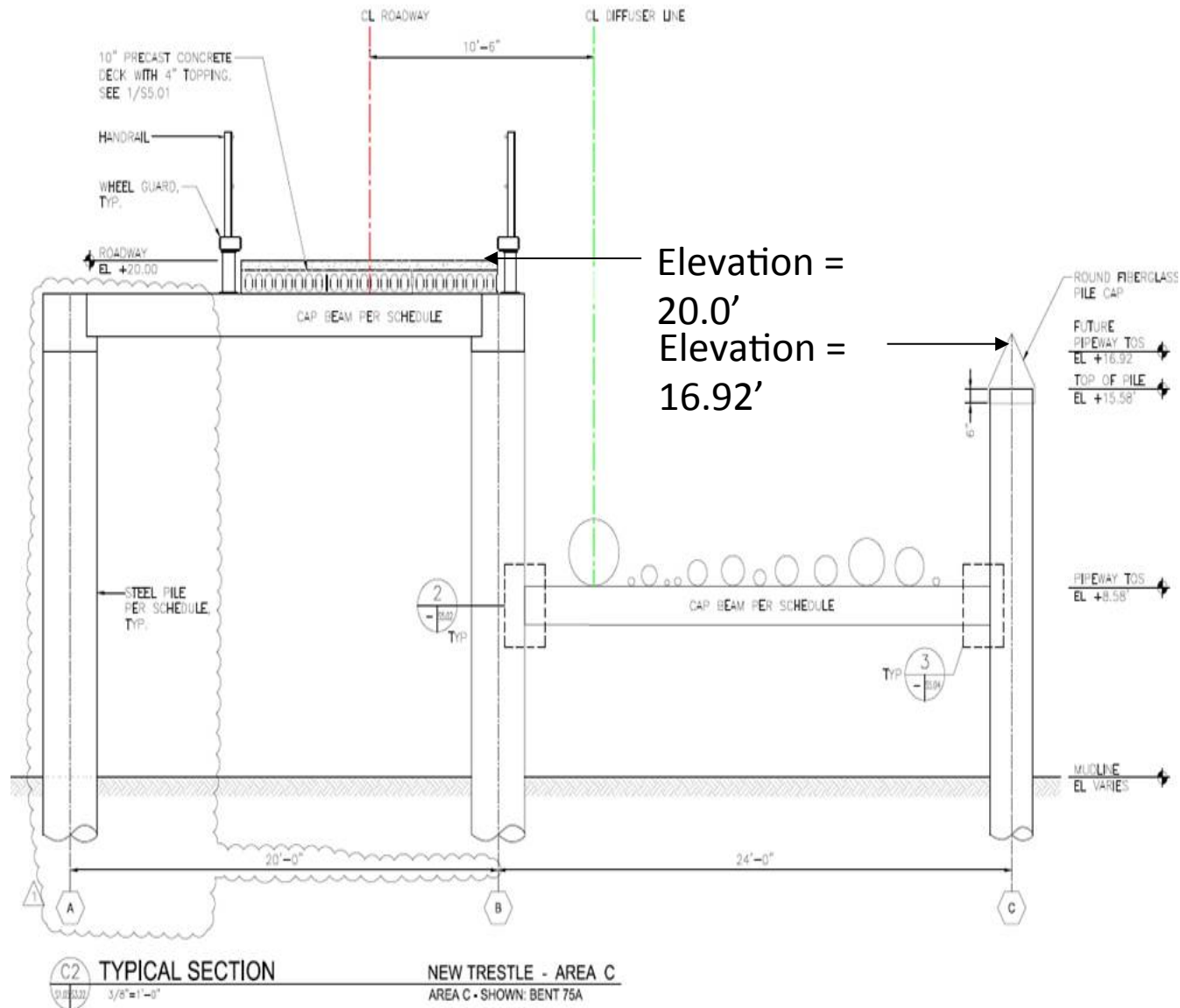
NEW TERMINAL PROJECT ELEMENTS



BERTH 1A LAYOUT SHOWING BERTHED SHIP



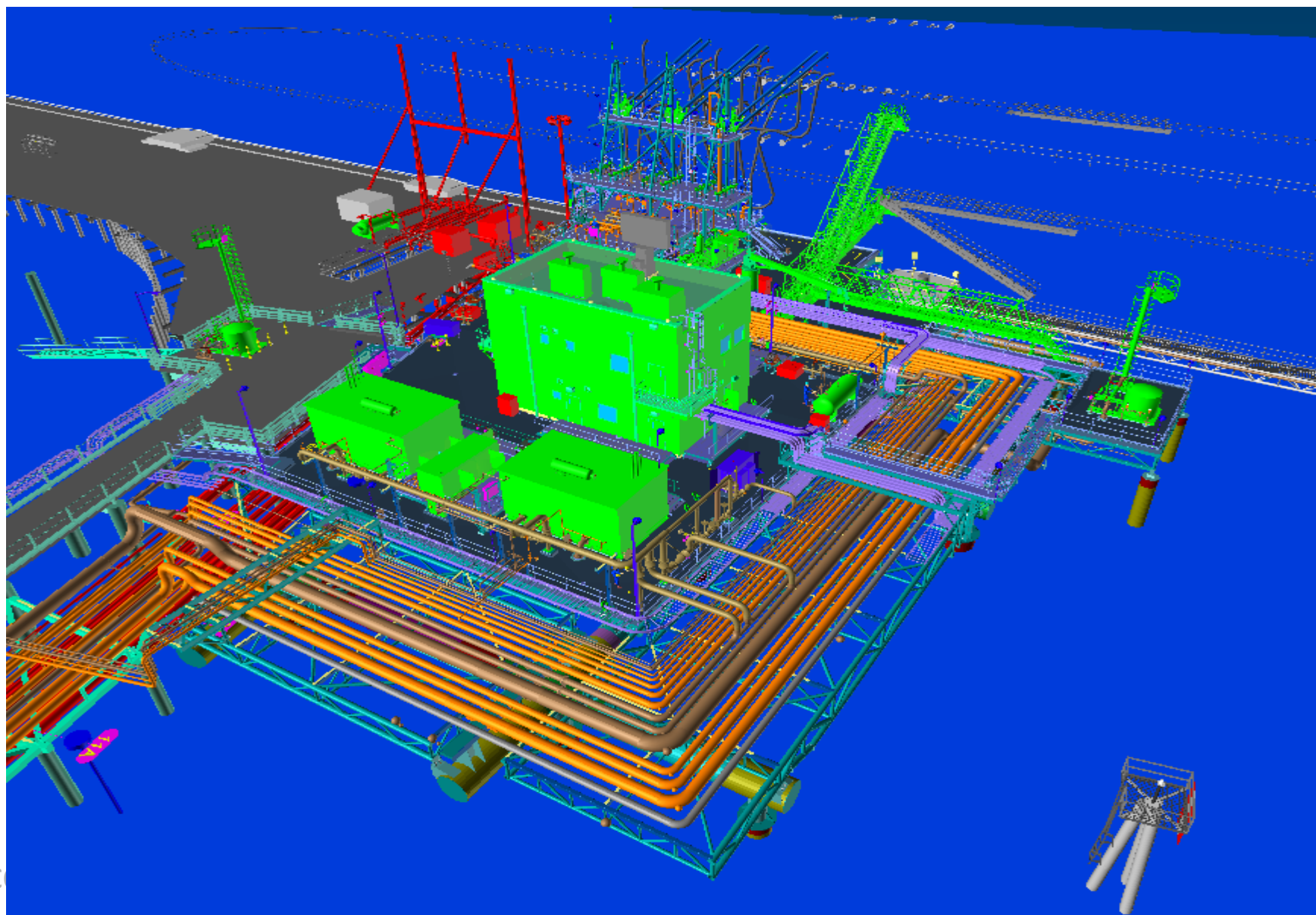
TYPICAL NEW TRESTLE "BENT"



STATE OF ART PROJECT DESIGN



- Designed by Marine Terminal Engineering Experts
 - Anvil – Electrical & Piping
 - Ben C. Gerwick / COWI – Structural
 - Langan Treadwell Rollo – Geotechnical
- Utilized three dimensional Computer Aided Design (CAD)
- Extensive Design Quality Assurance (QA) by multiple engineering specialists
- Design included MOTEMS required oversight and approval by State Lands Commission Marine Facilities Division engineers
- Design, drawings and calculations also evaluated by the BCDC Engineering Criteria Review Board



PROJECT CONSTRUCTION SCHEDULE



- In-Water Work Window: August 2015 – November 2015
 - Install 401 new steel pilings
- Berth 1A: December 2015 – August 2016
 - Install pile caps, deck modules, above deck equipment, structures, instrumentation and electrical
 - Complete “above water” construction of mooring dolphin, oil spill response dock and escape boat lifts
- Approach Trestle: December 2015 – November 2016
 - Install new pile caps and other structural steel
 - Install new roadway and bikeway
 - Demo existing piles / structure
- Cutover to Berth 1A: November 2016 – December 2016
 - Shutdown wharf operations and perform all piping tie-ins
 - Perform all final system walkdowns and mechanical/instrument checks
 - Perform final training
 - Commission Berth 1A

SAFETY ASPECTS



- Rigorous seismic design criteria required by MOTEMS (that exceed normal local earthquake building codes)
- Rapid pipeline shut-off valves to significantly decrease response time for operators
- Enhanced emergency response capabilities
 - Additional fire fighting and spill response equipment
 - New response and escape boat docks
- New state-of-the-art Operations Control Building
- Systems for remote rapid emergency ship releases, tension monitoring of mooring lines and allision avoidance are also required by lease conditions

JURISDICTIONAL AGENCY AUTHORIZATIONS



- State Lands Commission CEQA EIR Certification / 30 year lease renewal
- Project Permitting
 - US Army Corps of Engineers (USACE) Nationwide Permit
 - Biological Opinions from Service Agencies
 - US Fish and Wildlife Service
 - National Marine Fisheries Service
 - Regional Water Quality Control Board (RWQCB) Water Quality Certification
 - BCDC Major Permit application scheduled for consideration hearing on July 16

All agency authorizations restrict in-water construction to a Work Window of August 1 through November 30 for fish protection.

ADDITIONAL ENVIRONMENTAL BENEFITS



- Removal of approximately 900 creosote treated piles
- Funding for McNabney Marsh Restoration (East Bay Regional Park adjacent to I-680 near Benicia - Martinez Bridge)
- Enhancement of California Clapper Rail habitat
- Provides more than 10 acres of enhanced Salt Marsh Harvest Mouse habitat in perpetuity
- Required stormwater treatment mitigation for new terminal approach road
- Required Osprey nest relocation

COMPLIANCE WITH BCDC PLANS & POLICIES



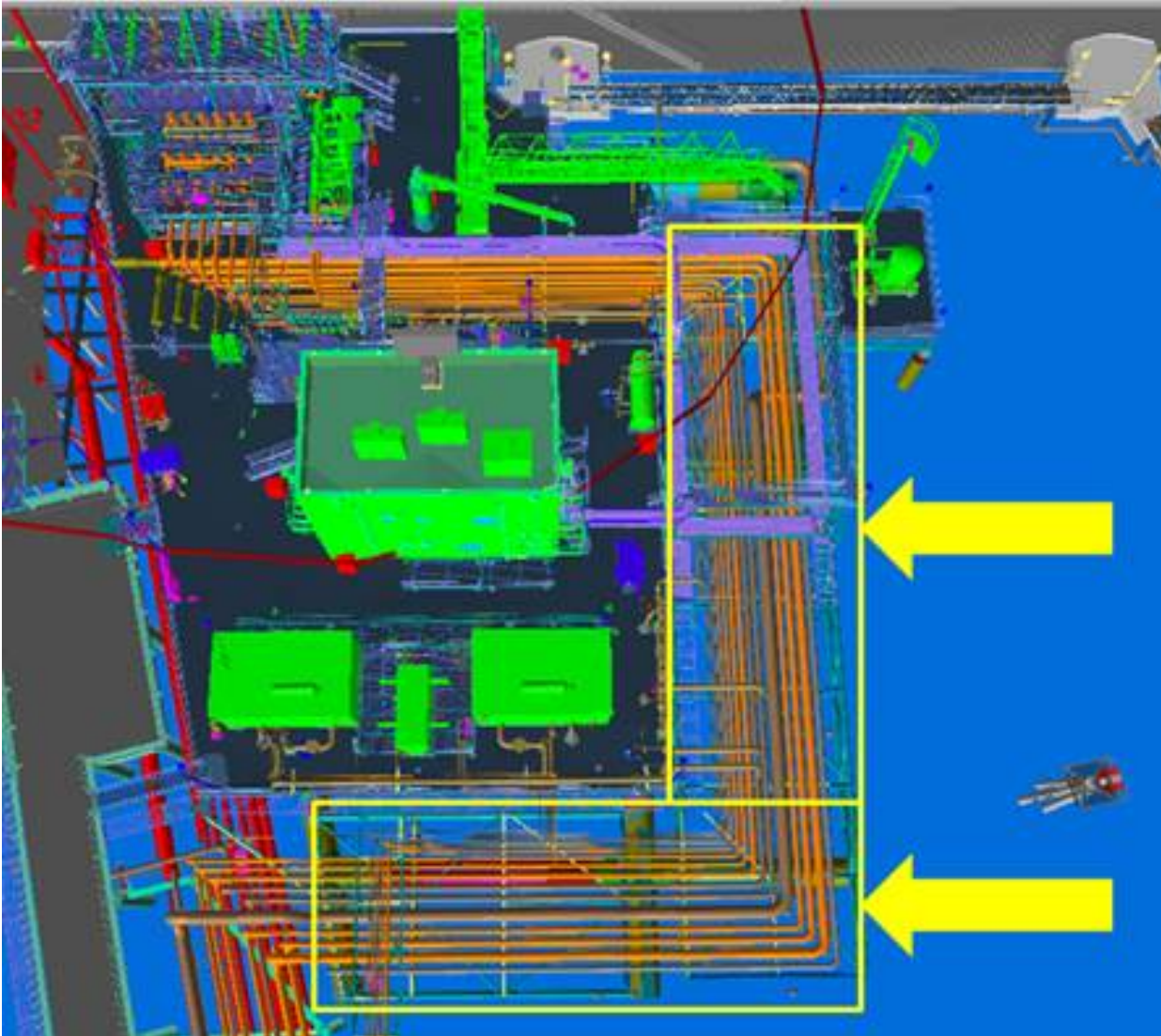
- Increases Bay open water surface area by 11,939 square feet
- New Berth 1A, terminal approach road and pipeway supports designed to accommodate future sea level rise per Bay Plan
- Installation of five seismic accelerometers on the new Berth 1A and approach road as requested by the ECRB
- The application before you for consideration today has other “special conditions” – all of which Tesoro has committed to address

QUESTIONS?

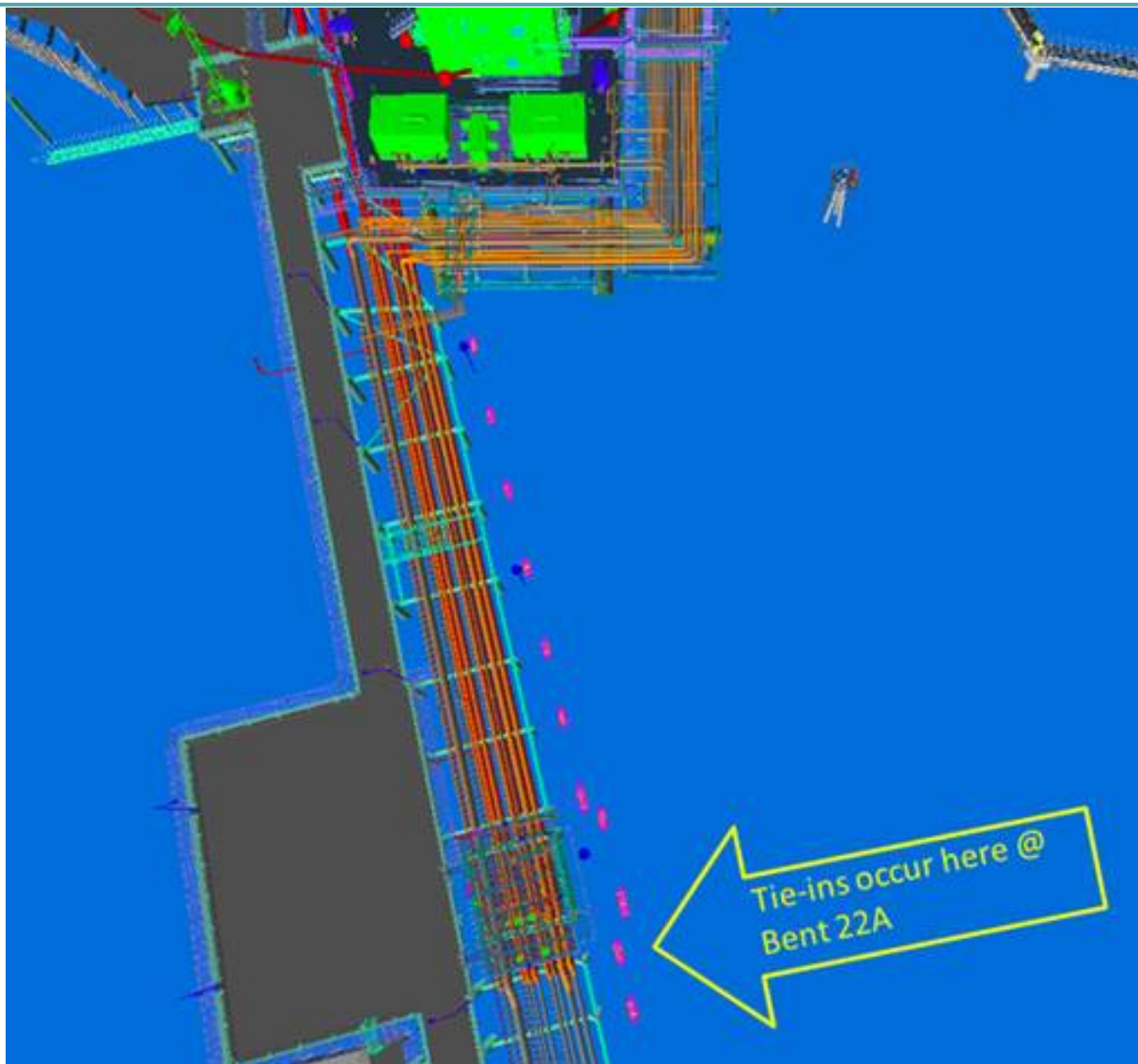


End of Presentation

NEW BERTH 1A PIPING LAYOUT



NEW BERTH 1A PIPING CONNECTION TIE IN



EXISTING AVON TERMINAL



BCDC JURISDICTION



SHARED VALUE



Improving the quality of life in areas where we work and live:

- \$500,000+ donated to charities in 2014 alone with focus on
 - STEM Education (science, technology, engineering & math)
 - Public Safety
 - Environmental Conservation & Sustainability
- 2,000+ volunteer hours worked each year
- 15 baseball diamonds & soccer fields used by the community for \$1/year.
- Community Advisory Panel (CAP) existing of 14 members of the community meeting monthly to discuss issues and concerns.

COMMUNITY ENGAGEMENT



We support more than 50 charities and community organizations, including :

